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EDITORIALS

Tobacco control: new resources, existing treaties, and emerging challenges

International investment in tobacco control is more important than ever

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Tobacco use remains the leading preventable cause of death in the world.¹ Three research papers in *The BMJ* examine smoking and efforts to deal with it, and these studies pose important questions about progress made and where to go next.

Hoffman and colleagues describe a new open access dataset, the International Cigarette Consumption Database (ICCD).² In their paper (doi:10.1136/bmj.l2231), they chronicle an ambitious programme of work to identify, review, and report estimates of cigarette consumption from sales and other data in 214 countries (former and present). The ICCD includes 71 countries where reliable data were available from 1970 to 2015. It identifies a decline in cigarette consumption per capita in most countries in the past three decades, but also substantial increases in China and Indonesia, and a doubling of consumption in Russia in the years immediately after the collapse of the former Soviet Union. This valuable dataset is now freely available and provides a tool for future research to assess trends and monitor the impact of interventions.

Although the ICCD covers 85% of the world's population, the researchers struggled to find reliable data for many countries, particularly in Africa. These data complement but cannot replace prevalence surveys that provide valuable information on smoking across different groups in the population. The ICCD also focuses on cigarettes and excludes other tobacco products, including smokeless tobacco, consumed by 300 million people and linked to cancer, heart disease, and adverse pregnancy outcomes when used in its more harmful forms.³

Framework convention on tobacco control

The ICCD was used in Hoffman and colleagues' second paper (doi:10.1136/bmj.l2287) to evaluate the impact of the Framework Convention on Tobacco Control (FCTC).⁴ The FCTC is an international treaty adopted in 2003 that required its 181 signatories to implement evidence based measures for tobacco control. The researchers used interrupted time series analysis and forecast event modelling to assess cigarette consumption levels before and after 2003 for the countries in the ICCD. They concluded that the FCTC had not accelerated existing declines in consumption overall, but they did find highly

variable patterns. High income countries saw large reductions in smoking, but low and middle income countries and Asian countries increased cigarette consumption per capita.

At face value, these findings suggest that the FCTC has not yet delivered on its main objective, to reduce smoking and associated harms. But that interpretation is too simplistic, given divergence across countries. As smoking began to fall in high income countries (a trend that began before the treaty), tobacco manufacturers turned their attention to new markets in low and middle income countries where the industry saw the potential for growth. These countries had limited capacity to combat industry attempts to delay or derail FCTC policies.⁵

Previous research found that full implementation of tobacco taxes, smoke-free laws, advertising bans, and cessation support, through robust legislation and rigorous enforcement did result in substantial declines in prevalence.⁶ The more measures were fully implemented, the greater the rate of decline. But in many countries, particularly low and middle income countries, FCTC implementation has been slow. The key lesson from Hoffman and colleagues' second paper is that ongoing efforts to support FCTC countries to deliver on their obligations are urgently needed. This is not a failure of the treaty but a call for continued investment in international tobacco control to increase capacity, improve governance, and enhance cooperation across countries to combat tobacco industry influence.

E-cigarettes

While countries have been attempting to implement the FCTC, the market has evolved and new products have emerged, most notably electronic cigarettes that do not contain tobacco but deliver nicotine (when present) in an aerosol. Existing research suggests that e-cigarettes are less harmful than smoking⁷ and can help smokers quit,⁸ and can appeal to young people. In the third paper (doi:10.1136/bmj.l2219), Hammond and colleagues provide new evidence from repeat cross sectional surveys of 16-19 year olds in the United States, Canada, and England.⁹ They report that recent and regular vaping increased in both North American countries between 2017 and 2018. At least part

of this increase could have been driven by new vaping products that contain nicotine salts and are discreet to use. Worryingly, smoking prevalence in 16-19 year olds also increased in Canada during the same period, but not the US. By contrast, no significant increase in vaping or smoking was found in England.

While the characteristics of young people are unlikely to vary substantially between North America and England, the policy environment is substantially different.¹⁰ Initially through European legislation with subsequent domestic additions, England has introduced a ban on most forms of e-cigarette marketing and limits on nicotine concentration in vapour products. In addition, mass media campaigns promote vaping for smoking cessation in adults and contain very different messages from industry marketing tactics. Research is ongoing in all three countries, but more is needed to understand the relation between the use of these products and other relevant developments such as the legalisation of cannabis in Canada and parts of the US.

Taken together, these new studies emphasise the value of comparative research for tobacco control across different countries. They also warn against complacency in our attempts to address smoking, now and in the future.

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